

Attachment 4 *Stormwater Flood Management Grant Proposal Littlerock Reservoir Sediment Removal Project Budget*

Attachment 4 consists of the following items:

- ✓ **Budget.** Attachment 4 provides a budget estimate for each budget category row of the proposed project.

Introduction

This attachment presents detailed budget information and supporting documentation for the Littlerock Reservoir Sediment Removal Project (LRSR Project). The project proposal offers tremendous investment value to the State for a number of reasons including:

- The proposal provides 54.0 percent of funding from non-State sources, demonstrating there is a strong commitment from PWD to the implementation of this project.
- 100 percent of the grant funding request will be used directly for construction or construction-related activities.

A summary budget for the LRSR Project is provided in Table 4-1 while Table 4-2 provides a cost breakdown by Work Plan task and sub-task. Tables 4-3 through 4-13 provide detailed budget breakdowns for each of the budget categories. The cost breakdown for each budget is provided for each of the budget categories included in the sample budget provided in Exhibit B of the Proposition 1E IRWM Proposal Solicitation Package and are consistent with the categories included in the Work Plan (provided in Attachment 3) and Schedule (provided in Attachment 5).

Table 4-1: Total Project Budget¹

Budget Category		(a) Requested Grant Amount	(b) Cost Share: Non-State Fund Source* (Funding Match)	(c) Cost Share: Other State Fund Source*	(d) Total	(e) % Fundi ng Matc h
(a)	Direct Project Administration		\$68,728		\$68,728	100%
(b)	Land Purchase/Easement		\$0		\$0	N/A
(c)	Planning/Design/Engineering/ Environmental Documentation		\$1,198,550		\$1,198,550	100%
(d)	Construction/Implementation	\$5,500,000	\$2,742,723		\$8,242,723	33.3%
(e)	Environmental Compliance/Mitigation/Enhancement		\$81,650		\$81,650	100%
(f)	Construction		\$192,900		\$192,900	100%

	Administration					
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)		\$118,000		\$118,000	100%
(h)	Construction/Implementation Contingency		\$2,060,682		\$2,060,682	100%
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$5,500,000	\$6,463,233		\$11,963,233	54.0%
*Sources of Funding: PWD funds						

Table 4-2: Cost Breakdown by Work Plan Task and Subtask

Row/Task	Category	Total
Row (a)	Direct Project Administration	\$68,728
Task 1	Project Administration	\$31,900
Task 2	Labor Compliance Program	\$26,928
Task 3	Reporting	\$9,900
Row (b)	Land Purchase Easement	\$0
Row (c)	Planning/Design/Engineering/Environmental Documentation	\$1,198,550
Task 4	Assessment and Evaluation	\$206,600
Task 5	Project Design	\$635,900
Task 6	Environmental Documentation	\$258,550
Task 7	Permitting	\$97,500
Row (d)	Construction	\$8,242,723
Task 8	Construction Contracting	\$8,100
Task 9	Construction	\$8,234,623
Row (e)	Environmental Compliance/Mitigation/Enhancement	\$81,650
Task 10	Environmental Compliance/Mitigation/Enhancement	\$81,650
Row (f)	Construction Administration	\$192,900
Task 11	Construction Administration	\$192,900
Row (g)	Other Costs	\$118,000
Row (h)	Construction Contingency	\$2,060,682
Row (i)	Grand Total	\$11,963,233

Row (a) Direct Project Administration

Task 1 – Project Administration:

The Project Administration cost estimate of \$31,900 was calculated based on labor costs shown in Table 4-3. Project Administration includes the following activities; completed tasks are not included in the cost estimate:

- Cost Recovery Agreement (completed)
- Memorandum of Understanding (completed)
- Project Administration
- Development of Financing
- Development of a Project Management Plan

Table 4-3: Project Administration Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	50	\$7,500
Project Manager	\$145.00	100	\$14,500
Engineering Technician	\$110.00	40	\$4,400
Construction Inspector	\$110.00	50	\$5,500
Total			\$31,900

Task 2 – Labor Compliance Program:

The Labor Compliance Program (LCP) cost estimate of \$26,928 as presented in Table 4-4 was calculated based on an estimated 0.30 percent fee of the project construction costs (Tasks 8 and 9 below) for the actual LCP plus minor costs for compliance monitoring. These allocated costs will be used to contract Golden State Labor Compliance, LLC or a similar company to implement the LCP.

Upon grant award notification, PWD will register with the Department of Industrial Relations Compliance Monitoring Unit as required by AB 436 to monitor and enforce prevailing wage requirements for this public works project. Labor for this effort is included in Table 4-4. The Labor Compliance Program includes the following activities; completed tasks are not included in the cost estimate:

- Labor Compliance Program
- Compliance Monitoring Unit Registration

Table 4-4: Labor Compliance Program Budget

Subtask	Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Labor Compliance Program	Third Party Compliance Program	Lump Sum	N/A	\$24,728
Compliance Monitoring Unit Registration	Engineering Technician	\$110.00	20	\$2,200
Total				\$26,928

Task 3 – Reporting:

The Reporting cost estimate of \$9,900 was calculated based on labor costs shown in Table 4-5. Reporting includes the following activities; completed tasks are not included in the cost estimate:

- Contract Agreement between PWD and the State of California
- Quarterly Invoices and Progress Reports
- Final Project Report
- Post-Completion Report

Table 4-5: Reporting Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	10	\$1,500
Project Manager	\$145.00	20	\$2,900
Engineering Technician	\$110.00	50	\$5,500
Total			\$9,900

Row (b) Land Purchase/Easement

The LRSR Project will not require purchase of land or acquisition of right-of-ways. PWD has received a special use permit from the USFS authorizing PWD to use National Forest System lands to operate the dam and will obtain an additional Special Use Authorization to construct and operate the Project.

Row (c) Planning/Design/Engineering/Environmental Documentation

Task 4 – Assessment and Evaluation:

The Assessment and Evaluation cost estimate of \$206,600 was calculated based on labor costs shown in Table 4-6. Assessment and Evaluation includes the following activities; completed tasks are not included in the cost estimate:

- DRAFT Littlerock Reservoir Sediment Removal Project Biological Resources Technical Report (completed draft)
- Geotechnical Investigation, Data Collection, and Survey Memoranda (completed)
- Feasibility Study (completed)
- DRAFT Littlerock Reservoir Hydrologic and Sediment Transport Analysis Technical Report
- Final Biological Technical Report
- Final Hydrological and Sediment Transport Analysis Technical Report
- Updated Topographic Mapping

Table 4-6: Assessment and Evaluation Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	10	\$1,500
Project Manager	\$145.00	20	\$2,900
Engineering Technician	\$110.00	20	\$2,200
Engineering/Planning Consultants	\$200.00	1,000	\$200,000
Total			\$206,600

Task 5 – Project Design:

The Project Design cost estimate of \$635,900 was calculated based on labor costs shown in Table 4-7. These design costs represent approximately 8 percent of total construction costs. Project Design includes the following activities:

- Excavation Plan

- Conceptual Design Plan
- 30% Design
- 60% Design
- 90% Design
- Final (100%) Design

Table 4-7: Project Design Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	40	\$6,000
Project Manager	\$145.00	100	\$14,500
Engineering Technician	\$110.00	100	\$11,000
Construction Inspector	\$110.00	40	\$4,400
Engineering/Design Consultants	\$200.00	3000	\$600,000
Total			\$635,900

Task 6 – Environmental Documentation:

The Environmental Documentation cost estimate of \$258,550 was calculated based on labor costs shown in Table 4-8. Environmental Documentation includes the following activities:

- Notice of Preparation - EIR/EIS
- Draft EIR/EIS
- Final EIR/EIS

Table 4-8: Environmental Documentation Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	40	\$6,000
Project Manager	\$145.00	10	\$1,450
Engineering Technician	\$110.00	10	\$1,100
Engineering/Design Consultants	\$200.00	1250	\$250,000
Total			\$258,550

Task 7 – Permitting:

The Permitting cost estimate of \$97,500 was calculated based on labor costs shown in Table 4-9. Permitting includes the following activities that will be completed by a consultant:

- USDA Forest Service SUA
- CWA Section 404 Permit (and WMP)
- CWA Section 402 Certification
- NPDES (and SWPPP)
- ESA BO
- Section 2081 ITP

- Section 1602 and 1605 Permits

Table 4-9: Permitting Budget

Discipline	Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
USDA Forest Service SUA	Staff	\$150.00	60	\$9,000
CWA Section 404 Permit (and WMP)	Staff	\$150.00	80	\$12,000
CWA Section 402 Certification	Staff	\$150.00	60	\$9,000
NPDES (and SWPPP)	Staff	\$150.00	80	\$12,000
ESA BO	Staff	\$150.00	250	\$37,500
Section 2081 ITP	Staff	\$150.00	40	\$6,000
Section 1602 and 1605 Permits	Staff	\$150.00	80	\$12,000
Total				\$97,500

Row (d) Construction

Task 8 – Construction Contracting:

The Construction Contracting cost estimate of \$8,100 was calculated based on labor costs shown in Table 4-8. Construction Contracting includes the following activities; completed tasks are not included in the cost estimate:

- Preparation of Bid Packages
- Advertisement of Bids
- Pre-Bid Contractors Meeting
- Evaluation of Bids
- Bid Award
- Notice to Proceed

Table 4-8: Construction Contracting Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	20	\$3,000
Project Manager	\$145.00	20	\$2,900
Engineering Technician	\$110.00	10	\$1,100
Construction Inspector	\$110.00	10	\$1,100
Total			\$8,100

Task 9– Construction:

The Construction cost estimate of \$8,234,623 was calculated based on the activities and labor costs shown in Table 4-9.

Table 4-9: Construction Budget

Activity	Labor Hrs	Labor Amount	Material Amount	Equip Amount	Sub Amount	Other Amount	Total Amount
Subtask 9.1 Special Conditions¹							
Mobilization	-	-	-	\$61,000	\$64,095	\$15,000	\$140,095
Temporary Electric Power – Dewatering	1,152	\$90,769	\$50,600	\$75,373	-	\$223,600	\$440,342
Asphalt Paving	-	-	-	-	\$100,000	-	\$100,000
Lawns & Grasses	-	-	-	-	\$171,968	-	\$171,968
Sub total							\$852,405
Subtask 9.2 Grade Control Structure¹							
Water Truck	-	-	-	\$25,200	-	-	\$25,200
Site Clearing	788	\$42,659	-	\$12,662	-	-	\$55,321
Dewatering	5,146	\$334,476	\$144,979	\$39,318	\$23,000	-	\$541,773
Excavation Support & Protection	163	\$9,893	\$43	\$58,253	\$19,271	-	\$87,460
Earthwork	5,197	\$339,795	-	\$509,154	-	-	\$848,949
Soil Stabilization	2,600	\$167,252	\$120,000	\$180,188	\$10,000	-	\$477,440
Transmission Pipelines	936	\$53,109	\$86,236	\$25,400	-	\$4,470	\$169,215
Water Supply & Treatment Pumps	356	\$33,014	\$4,200	\$4,166	\$37,820	-	\$79,200
Sub Total							\$2,284,558
Subtask 9.3 Sediment Removal²							
Sediment Excavation and Disposal	-	-	-	-	-	\$5,097,660	\$5,097,660
Sub Total							\$5,097,660
Total							\$8,234,623

Notes:

1. Based on *Palmdale Water District Littlerock Reservoir Sediment Removal Project Concept - Opinion of Construction Cost*, CDM-Smith, 2013.
2. Based on *Littlerock Reservoir Approximate Costs*, Aspen Environmental, January 2007 (costs for sediment removal have been adjusted to 2012 dollars using CCI and are prorated for a net volume of 900,000 cubic yards).

Row (e) Environmental Compliance/Mitigation/Enhancement

Task 10- Environmental Compliance/Mitigation/Enhancement:

The Environmental Compliance/Mitigation/Enhancement cost estimate of \$81,650 was calculated based on labor costs shown in Table 4-10. Environmental Compliance/Mitigation/Enhancement includes the following activities:

- Mitigation Monitoring Compliance and Reporting Program

Table 4-10: Environmental Compliance/Mitigation/Enhancement Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	200	\$30,000
Project Manager	\$145.00	250	\$36,250
Engineering Technician	\$110.00	100	\$11,000
Construction Inspector	\$110.00	40	\$4,400
Total			\$81,650

Row (f) Construction Administration

Task 11- Construction Administration:

The Construction Administration cost estimate of \$192,900 was calculated based on labor costs shown in Table 4-11. Construction Administration includes the following activities:

- Construction Administration
- Quarterly Construction Reports

Table 4-11: Construction Administration Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	200	\$30,000
Project Manager	\$145.00	380	\$55,100
Engineering Technician	\$110.00	80	\$8,800
Construction Inspector	\$110.00	900	\$99,000
Total			\$192,900

Row (g) Other Costs

Other Costs are estimated at \$118,000 and are based on labor costs shown in Table 4-12. Other Costs include the following activities; completed tasks are not included in the cost estimate:

- Development of Data Management
- Development of Performance Measures and Monitoring Plan
- Development of Operations and Maintenance Plan

Table 4-12: Other Costs Budget

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total
Engineering Manager	\$150.00	80	\$12,000
Project Manager	\$145.00	200	\$29,000
Engineering Technician	\$110.00	320	\$35,200
Construction Inspector	\$110.00	380	\$41,800
Total			\$118,000

Row (h) Construction Contingency

A contingency of 25 percent is added to the construction costs listed in Tasks 8 and 9 to account for unknown conditions encountered during construction or implementation of the Project. The 25 percent value is consistent with a “budget level estimate” as defined by the American National Standards Institute (ANSI) for projects that are at a level of project definition that is 15 to 45 percent complete. PWD has selected this number as appropriate for the LRSR. The contingency costs are \$2,060,682.

Row (i) Grand Total

The grand total of rows (a) through (h) is \$11,963,233 as shown in Table 4-13.

Table 4-13: Row (i) Grand Total Costs

Row	Budget Category	Total Costs
(a)	Direct Project Administration Costs	\$68,728
(b)	Land Purchase/Easement	\$0
(c)	Planning/Design/Engineering/ Environmental Documentation	\$1,198,550
(d)	Construction/Implementation	\$8,242,723
(e)	Environmental Compliance/ Mitigation/Enhancement	\$81,650
(f)	Construction Administration	\$192,900
(g)	Other Costs (Includes Permitting)	\$118,000
(h)	Construction/Implementation Contingency	\$2,060,682
(i)	Grand Total	\$11,963,233